## REMARKS

In response to the Office Action dated October 29, 2004, Applicants respectfully request reconsideration and allowance of the present application. Claims 1-11 are currently pending in the application. Applicants note with appreciation the indication of allowable subject matter with regard to claims 9 and 10.

On page 2 of the Office Action, claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. By the foregoing amendment, Applicants have amended the claim to read "a predefined maximum VOB number" which is substantially in accordance with the helpful suggestion provided in the Office Action. Applicants submit that this term is properly supported in the specification at, for example, page 43. Accordingly, Applicants respectfully request that this rejection be withdrawn as dependent claim 9 has been corrected.

On pages 2 and 3 of the Office Action, claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,737,022 to Yamaguchi et al. (hereinafter Yamaguchi). Applicants respectfully traverse this rejection for at least the reasons provided below.

Yamaguchi is directed to a device and method for coding and decoding a motion picture signal and for applying motion compensation to each block unit of the motion picture signal.

On the other hand, the present invention, as set forth in independent claim 1, is directed to an image coding apparatus. The coding apparatus includes compression coding means for compressing and coding an input video signal, scene change detecting means for detecting a scene change from the input video signal, and resolution changing means for changing a resolution of the input video signal synchronously with the scene change. Applicants respectfully submit that the Yamaguchi patent does not teach (or suggest) each and every feature of the present invention set forth in independent claim 1.

For example, Applicants submit that Yamaguchi does not disclose resolution changing means for changing a resolution of the input video signal synchronously with the scene change, as set forth in claim 1. The Office Action alleges that this feature is taught in column 17, lines 31-34 of the Yamaguchi patent. This excerpt of Yamaguchi states the following:

> In this case, if the number of blocks in which the latter value becomes larger than the former value is larger than a half of the total number of blocks in the frame, for example, it is determined that the scene change has occurred, and if the frame is used as a reference image for another frame, it supplies a scene change identifying signal to a resolution converting circuit 530 and an encoder 540.

Applicants respectfully submit that there is no discussion within this excerpt which indicates that a resolution of the input video signal is changed synchronously with the scene change as set forth in independent claim 1. In fact, this excerpt only appears to indicate that if it is determined that a scene change has occurred "...and if the frame is used as a reference image for another frame, it supplies a scene change identifying signal to a resolution converting circuit 530 and an encoder 540." Furthermore, in column 17, lines 49-52, Yamaguchi indicates that "[a]s another method for lowering the spatial resolution of a frame **immediately after occurrence of the scene change**, instead of lowering the space resolution by use of the resolution converting circuit 530, it is possible to (emphasis added)...." Thus, Applicants submit that, contrary to the contention in the Office Action, Yamaguchi does not disclose changing a resolution of the input video signal synchronously with the scene change, as set forth in claim 1.

The present invention, as set forth in independent claim 2, is directed to an image coding apparatus including compression coding means for compressing and coding an input video signal, still scene detecting means for detecting a still scene from the input video signal, and resolution changing means for changing a resolution of the input video signal when the still scene is detected. Applicants respectfully submit that the Yamaguchi patent does not teach (or suggest) each and every feature of the present invention set forth in independent claim 2.

For example, Applicants respectfully submit that Yamaguchi does not specifically disclose still scene detecting means for detecting a still scene from the input video signal, and resolution changing means for changing a resolution of the input video signal when the still scene is detected as recited in independent claim 2.

Initially, Applicants note that the Office Action appears to equate the scene change detection unit 520 of Yamaguchi to the claimed still scene detecting means. However, Applicants submit that this aspect of the rejection cannot be maintained because the scene

change detection unit supplies a scene change identifying signal to the resolution converting circuit 530. Applicants can find no disclosure of changing a resolution of the input video signal when the still scene is detected, as set forth in independent claim 2. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection or in the alternative, a specific recitation within Yamaguchi of changing the resolution when a still scene is detected.

On pages 3-5 of the Office Action, claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,259,733 to Kaye et al. (hereinafter Kaye). Applicants respectfully traverse this rejection for at least the reasons provided below.

In rejecting independent claim 1 (the features of which are discussed in more detail above) the Office Action indicates that elements 338 and 334 of FIG. 3B allegedly teach Applicants' scene change detecting means and resolution changing means, respectively. Applicants submit that these elements of Kaye do not teach the claimed features. As indicated in column 7, lines 47-50, if a scene change is detected, $D_i$ is set to a maximum value. As indicated in column 4, lines 45-65, $D_i$ represents a bit rate demand value and is used to obtain an allocated bit rate $R_i$ that is provided as a feedforward signal from a pre-processor to a respective compressor. Applicants can find no excerpt of Kaye indicating that the input video signal is changed synchronously with the scene change as set forth in independent claim 1. In fact, Applicant submits that the statement that the "resolution and scene change operate synchronously because both are detected and utilized by the central control simultaneously" is not supported by the disclosure of Kaye and also does not address when the resolution is changed with respect to the scene change. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

In rejecting claim 2, the features of which are discussed in more detail above, the Office Action again indicates that elements 338 and 334 of FIG. 3B allegedly teach Applicants' still scene change means and resolution changing means, respectively. Applicants submit that these elements of Kaye do not teach the claimed features. As indicated in column 7, lines 47-50, if a scene change is detected, $D_i$ is set to a maximum value. Applicants can find no disclosure within Kaye regarding detecting a still scene. Moreover, Applicants can find no disclosure of changing a resolution of the input video signal when the still scene is detected, as set forth in independent claim 2. The statement that

the "resolution and scene change operate synchronously because both are detected and utilized by the central control simultaneously" is not supported by the disclosure of Kaye and also does not address Kaye's non-disclosure of a still scene detecting means. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection or in the alternative, a specific recitation within Kaye of changing the resolution when a still scene is detected.

Independent claim 3 is directed to an image coding apparatus in accordance with another exemplary embodiment of the present invention. Specifically, the apparatus includes compression coding means for outputting an MPEG stream by compressing and coding an input video signal, and resolution changing means for changing a resolution of the input video signal. The compression coding means includes means for determining a GOP (group of pictures) structure of the MPEG stream, and when the resolution is changed, GOPs are also changed substantially at the same time. Applicants respectfully submit that the Kaye patent does not teach (or suggest) each and every feature of the present invention set forth in independent claim 3.

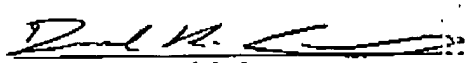
In rejecting claim 3, the Office Action indicates that elements 338 and 33[illegible] of FIG. 3B allegedly teach Applicants' scene change detecting means and resolution changing means, respectively. Applicants can find no disclosure within Kaye indicating that when the resolution is changed, GOPs are also changed substantially at the same time as set forth in independent claim 3. In fact, Applicants submit that the statement that the "resolution and scene change operate synchronously because both are detected and utilized by the central control simultaneously" is merely an allegation without any support drawn from the Kaye patent and, additionally, does not address when the resolution is changed with respect to the scene change. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections for at least the reasons provided above.

On pages 5 and 6 of the Office Action, claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye in view of U.S. Patent No. 6,507,615 to Tsuji et al (hereinafter Tsuji). On pages 6 and 7 of the Office Action, claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye in view of U.S. Patent No. 6,160,844 to Wilkinson. On pages 7 and 8 of the Office Action, claims 6-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaye in view of U.S. Patent No. 6,400,768 to Nagumo et al (hereinafter

Nagumo). Applicants respectfully submit that since a *prima facie* case of obviousness has not been established with regard to independent claim 3, that a *prima facie* case of obviousness has not been established for any of claims 4-8 and 11 which are dependent upon claim 3. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise which could be eliminated through discussions with Applicants' representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,



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